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STUDENT ID NO									

# **MULTIMEDIA UNIVERSITY**

# FINAL EXAMINATION

TRIMESTER 1, 2018/2019

## **BAC 3674 – ADVANCED MANAGEMENT ACCOUNTING**

(All sections / Groups)

18<sup>th</sup> October 2018 9.00 a.m. – 12.00 p.m. (3 Hours)

## INSTRUCTIONS TO STUDENT:

- 1. This paper consists of SIX (6) pages excluding cover page with 4 Questions only.
- 2. Answer ALL questions.
- 3. All questions carry equal marks and the distribution of marks for each question is given.
- 4. Please write all your answers in the Answer Booklet provided.

## **QUESTION 1**

## PART A

Rusa Company manufactures a part for use in its production of hats. When 10,000 items are produced, the costs per unit are:

`	RM
Direct materials	0.75
Direct manufacturing labor	3.00
Variable manufacturing overhead	1.50
Fixed manufacturing overhead	<u>1.60</u>
Total	<u>6.85</u>

Axe Company has offered to sell to Rusa Company 10,000 units of the part for RM6.00 per unit. The plant facilities could be used to manufacture another item at a savings of RM9,000 if Rusa accepts the offer. In addition, RM1.00 per unit of fixed manufacturing overhead on the original item would be eliminated.

## Required:

i) What is the relevant per unit cost for the original part?

(4 marks)

ii) Which alternative is the best for Rusa Company? By how much?

(8 marks)

iii) What are opportunity costs? Explain why opportunity costs are not recorded in financial accounting systems.

(4 marks)

#### PART B

Selesa Manufacturing Company produces inventory in a highly automated assembly plant in Dengkil, Selangor. The automated system is in its first year of operation and management is still unsure of the best way to estimate the overhead costs of operations for budgetary purposes. For the first six months of operations, the following data were collected:

	Machine-hours	Kilowatt-hours	Total Overhead Costs (RM)
January	4,560	5,424,000	405,600
February	4,380	5,208,000	404,160
March	4,680	5,400,000	407,040
April	3,960	5,148,000	404,160
May	3,900	5,040,000	391,200
June	3,720	4,944,000	384,000

## Required:

i) Use the high-low method to determine the estimating cost function with machine-hours as the cost driver.

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(3 marks)

ii) Use the high-low method to determine the estimating cost function with kilowatt-hours as the cost driver.

(3 marks)

iii) For July, the company ran the machines for 4,000 hours and used 4,550,000 kilowatthours of power. The overhead costs totaled RM365,000. Which cost driver was the best predictor for July?

(3 marks)

[TOTAL: 25 MARKS]

## **QUESTION 2**

Wonderful Windows has consistently charged manufacturing overhead costs to produce using machine hours. However, the company president has decided that the use of activity based costing (ABC) would provide more realistic cost estimates and, in turn, give the company an edge in pricing over its competitors. Wonderful's accountant and production manager have provided the following budgeted information for 2018, given a budgeted capacity of 1,500,000 machine hours.

Type of manufacturing cost	RM
Electric power	600,000
Operation cell	2,000,000
Material handling	1,300,000
Quality control inspection	800,000
Machine setups	350,000

Type of manufacturing cost	Activity driver
Electric power	300,000 kilowatt hours
Machine setups	25,000 setups
Operation cell	200,000 square feet
Quality control inspections	40,000 inspections
Material handling	260,000 material moves

A construction company approached the general manager of marketing, about a bid for 2,500 windows. The general manager asked the cost accountant to prepare a cost estimate for producing the 2,500 windows; she received the following data:

Direct material cost	RM70,000
Direct labour cost	RM160,000
Machine hours	6,000
Direct labour hours	2,000
Number of quality control inspection	20
Operation cells – square feet	1,500
Number of material handling moves	15
Number of setups	12
Electric power – kilowatt hours	550

#### Required:

a) What is the predetermined overhead rate if the traditional measure of machine hours is used?

(2 marks)

b) What is the manufacturing cost per window as presently accounted for?

(4 marks)

c) What is the manufacturing cost per window under the proposed ABC method?

(4 marks)

d) If the two systems will result in different cost estimates, which cost accounting system is preferable as a pricing base and why?

(6 marks)

e) If activity-based management (ABM) were implemented prior to an ABC system, which of the manufacturing overhead costs might be reduced or eliminated? Why?

(4 marks)

f) How can ABC and target costing be used together to motivate ABM?

(5 marks)

[TOTAL: 25 MARKS]

## **QUESTION 3**

#### PART A

Kenchana Drilling Company is an oil and gas exploration and drilling company operating off the coast of Kelantan. Oil and gas companies inevitably incur costs on unsuccessful exploration ventures called dry holes. A debate continues over whether those costs should be written off as a period expenses or capitalized as part of the full cost of finding profitable oil and gas ventures. Management has been writing these costs off to expense as incurred. However, this year a new management team was hired to improve the profit picture of the firm's Oil and Gas Exploration Division with the provision that it would receive a bonus equal to 10 percent of any profits in excess of the division's base-year profits. However, no bonus would be paid if profits were less than 20 percent of end-of-year investment. The following information was included in the division's performance report.

	Base Year	This Year	Increase over Base Year
	(RM)	(RM)	(RM)
Sales revenue	4,000,000	4,100,000	, ,
Costs incurred:			
Dry holes	800,000	0	
Depreciation and other	750,000	780,000	
amortization			
Other costs	1,550,000	1,600,000	
Division profit	900,000	1,720,000	820,000
End-of-year investment	6,900,000	8,100,000*	
*includes other investments ne	ot an issue here		

During the year, the new team spent RM1 million on exploratory activities, of which RM900,000 was for unsuccessful ventures. The new management team has included the RM900,000 in the current end-of-year investment base because, it states, "You can't find the good ones without hitting a few bad ones."

## Required:

i) What is the ROI for the base year and the current year?

(6 marks)

- ii) What is the amount of the bonus that the new management team is likely to claim?

  (1 mark)
- iii) If you were Kenchana Drilling Company's board of directors, how would you respond to the new management's claim for the bonus?

(3 marks)

iv) Due to competitive measures, the management of Kenchana Drilling Company decides to practice downsizing activities. Describe 'downsizing', its causes, and its primary risks.

(4 marks)

#### PART B

i) KiddoTravel produces car seats for children from newborn to 2 years old. KiddoTravel's only problem with its car seats was sti\*ching in the straps. The problem can usually be detected and repaired during an internal inspection. Inspection costs RM4.00 per car seat, and repair costs RM1.50 per car seat. All 100,000 car seats were inspected last year, and 10% were found to have problems with the stitching. Another 2% of the 100,000 car seats had problems with the stitching, but the internal inspection did not discover them. Defective units that were sold and shipped to customers are shipped back to KiddoTravel and repaired. Shipping costs are RM10.00 per car seat, and repair costs are RM1.60 per car seat. Negative publicity will result in a loss of future contribution margin of RM90 for each external failure.

## Required:

Calculate appraisal, internal failure and external failure costs.

(5 marks)

ii) KiddoTravel is concerned with the high up-front cost of inspecting all 100,000 units. It is considering an alternative internal inspection plan that will cost only RM2.50 per car seat inspected. During the internal inspection, the alternative technique will detect only 7% of the 100,000 car seats that have stitching problems. The other 5% will be detected after the car seats are sold and shipped. What are the total Cost of Quality for the alternative technique?

(6 marks)

[TOTAL: 25 MARKS]

### **QUESTION 4**

#### PART A

Mewah Corporation has two divisions. The fabrication division transfers partially completed components to the assembly division at a predetermined transfer price. The facbrication division, which has a standard variable production cost per unit of RM300, has no excess capacity and could sell all of its component to outside buyers at RM380 per unit in a perfectly competitive market.

## Required:

i) Determine a transfer price using the general rule.

(2 marks)

ii) How would the transfer price change if the fabrication division had excess capacity?

(1 mark)

Let's say, the fabrication division's full (absorption) cost of a component is RM340, which includes RM40 of applied fixed overhead costs. The transfer price has been set at RM374, which is the fabrication division's full cost plus 10 percent mark-up.

The assembly division has a special offer of RM465 for its product. The assembly division incurs variable costs of RM100 in addition to the transfer price for fabrication division's components. Both divisions currently have excess production capacity.

#### Required:

iii) Is the assembly division's manager likely to accept or reject the special offer? Why?

(5 marks)

iv) Is this decision in the best interests of Mewah Corporation as a whole? Why?

(5 marks)

v) Suppose that the assembly division manager decides to reject the special offer. Is the manager acting ethically? Explain.

(3 marks)

vi) How could the situation be remedied using the transfer price?

(2 marks)

## PART B

i) What are the relationships among organizational goals, strategic plans, and a master budget for the coming period?

(4 marks)

ii) How would the use of a just-in-time inventory system affect a company's budget plan?
(3 marks)

[TOTAL: 25 MARKS]

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